

IN THE CLAIMS:

1. (Original) A frame for an electrolyser module comprising:
 - (a) a body;
 - (b) at least one electrolyser chamber opening defined in said body;
 - (c) at least one degassing chamber opening defined in said body; and
 - (d) at least one separated gas opening defined in said body to facilitate removal of gas separated from the gas and liquid mixture disposed in said at least one degassing chamber.
2. (Original) A frame for an electrolysis module, said frame comprising:
 - (a) a unitary body having a rounded peripheral shape;
 - (b) at least one electrolysis chamber opening defined in said body; and
 - (c) at least one degassing chamber opening defined in said body, said degassing chamber opening having a rounded shape.
3. (Original) A frame for an electrolysis module, said frame comprising:
 - (a) a unitary body;
 - (b) at least one electrolysis chamber opening defined in said body, said electrolysis chamber opening having a rounded shape; and
 - (c) at least one degassing chamber opening defined in said body, said degassing chamber opening having a rounded shape.
4. (Currently Amended) A frame as claimed in ~~any one of claims 1–3~~ wherein said degassing chamber opening is lung-shaped.
5. (Currently Amended) A frame as claimed in ~~any one of claims 1–3~~ wherein said degassing chamber opening is circular.
6. (Currently Amended) A frame as claimed in ~~any one of claims 1–3~~ wherein said degassing chamber opening is elliptical.
7. (Currently Amended) A frame as claimed in ~~any one of claims 1–6~~ wherein said electrolysis chamber opening is circular.
8. (Currently Amended) A frame as claimed in ~~any one of claims 2– 7~~ wherein said body has a rounded peripheral shape.

9. (Currently Amended) A frame as claimed in ~~any one of claims 1—8~~ 1 wherein said body has a circular peripheral shape.
10. (Currently Amended) A frame as claimed in ~~any one of claims 1—9~~ 1 wherein said body has a first side that is generally flat and an opposing second side that is generally flat.
11. (Currently Amended) A frame as claimed in ~~any one of claims 10~~ wherein said first side defines a first connecting surface and said second side defines a second connecting surface.
12. (Original) A frame as claimed in claim 11 wherein said first connecting surface and said second connecting surface have corresponding connecting structures to facilitate the first connecting surface of one said frame connecting with the second connecting surface of a corresponding one of said frames.
13. (Original) A frame as claimed in claim 12 wherein said connecting structures comprise corresponding elevations and depressions defined in said first and second connecting surfaces.
14. (Original) A frame as claimed in claim 13 wherein said elevations and depressions have corresponding block shapes.
15. (Original) A frame as claimed in claim 13 wherein said elevations and depressions have corresponding triangular shapes.
16. (Currently Amended) A frame as claimed in ~~any of claims 11—15~~ 1 wherein said first and second connecting surfaces are adapted to receive a sealing gasket between adjacent connected frames.
17. (Currently Amended) A frame as claimed in ~~any one of claims 1—16~~ 1 further comprising at least one electrolyte conduit opening defined in said body.
18. (Currently Amended) A frame as claimed in ~~any one of claims 1—17~~ 1 further comprising at least one separated gas conduit opening defined in said body.

19. (Original) A frame as claimed in claim 18 further comprising a separated gas connecting channel defined in said body for connecting said at least one degassing chamber opening to said at least one separated gas conduit opening.

20. (Currently Amended) A frame as claimed in ~~anyone of claims 1—19~~ 1 further comprising an electrolysis connecting channel defined in said body for connecting said at least one electrolysis chamber opening to said at least one degassing chamber opening.

21. (Currently Amended) A frame as claimed in ~~any one of claims 1—20~~ 1 wherein at least a portion of said at least one degassing chamber opening is positioned above said at last one electrolysis chamber opening.

22. (Currently Amended) A frame as claimed in ~~any one of claims 1—21~~ 1 wherein the surface area of said at least one degassing chamber opening is equal to or greater than the surface area of said at least one electrolysis chamber opening.

23. (Currently Amended) An electrolyser module comprising a plurality of frames as claimed in ~~any one of claims 1—22~~ 1, wherein said frames are connected together to define at least one electrolysis chamber and at least one degassing chamber, said degassing chamber having a rounded shape.

Claims 24-33 (canceled)

34. (Currently Amended) A frame as claimed in claim 2, wherein said frame has an opening that forms an electrolysis chamber, characterized in that the frames have one or more additional openings that form one or more degassing chambers, wherein the gas that is generated is collected and allowed to separate into a liquid and gas phase, and further ~~A holding frame according to claim 32~~ having two additional openings that form conduits for the removal of the gasses that are separated off in the internal degassing chambers.

Claims 35-41 (canceled)

42. (New) A frame as claimed in claim 2 wherein said degassing chamber opening is lung-shaped.

43. (New) A frame as claimed in claim 2 wherein said degassing chamber opening is circular.
44. (New) A frame as claimed in claim 2 wherein said degassing chamber opening is elliptical.
45. (New) A frame as claimed in claim 2 wherein said electrolysis chamber opening is circular.
46. (New) A frame as claimed in claim 45 wherein said body has a rounded peripheral shape.
47. (New) A frame as claimed in claim 2 wherein said body has a circular peripheral shape.
48. (New) A frame as claimed in claim 2 wherein said body has a first side that is generally flat and an opposing second side that is generally flat.
49. (New) A frame as claimed in claim 48 wherein said first side defines a first connecting surface and said second side defines a second connecting surface.
50. (New) A frame as claimed in claim 49 wherein said first connecting surface and said second connecting surface have corresponding connecting structures to facilitate the first connecting surface of one said frame connecting with the second connecting surface of a corresponding one of said frames.
51. (New) A frame as claimed in claim 50 wherein said connecting structures comprise corresponding elevations and depressions defined in said first and second connecting surfaces.
52. (New) A frame as claimed in claim 51 wherein said elevations and depressions have corresponding block shapes.
53. (New) A frame as claimed in claim 51 wherein said elevations and depressions have corresponding triangular shapes.
54. (New) A frame as claimed in claim 53 wherein said first and second connecting surfaces are adapted to receive a sealing gasket between adjacent connected frames.

55. (New) A frame as claimed in claim 2 further comprising at least one electrolyte conduit opening defined in said body.
56. (New) A frame as claimed in claim 2 further comprising at least one separated gas conduit opening defined in said body.
57. (New) A frame as claimed in claim 49 further comprising a separated gas connecting channel defined in said body for connecting said at least one degassing chamber opening to said at least one separated gas conduit opening.
58. (New) A frame as claimed in claim 2 further comprising an electrolysis connecting channel defined in said body for connecting said at least one electrolysis chamber opening to said at least one degassing chamber opening.
59. (New) A frame as claimed in claim 2 wherein at least a portion of said at least one degassing chamber opening is positioned above said at least one electrolysis chamber opening.
60. (New) A frame as claimed in claim 2 wherein the surface area of said at least one degassing chamber opening is equal to or greater than the surface area of said at least one electrolysis chamber opening.
61. (New) An electrolyser module comprising a plurality of frames as claimed in claim 2, wherein said frames are connected together to define at least one electrolysis chamber and at least one degassing chamber, said degassing chamber having a rounded shape.
62. (New) A frame as claimed in claim 2, wherein said frame has an opening that forms an electrolysis chamber, characterized in that the frames have one or more additional openings that form one or more degassing chambers, wherein the gas that is generated is collected and allowed to separate into a liquid and gas phase, and further having two additional openings that form conduits for the removal of the gasses that are separated off in the internal degassing chambers.
63. (New) A frame as claimed in claim 3 wherein said degassing chamber opening is lung-shaped.

64. (New) A frame as claimed in claim 3 wherein said degassing chamber opening is circular.
65. (New) A frame as claimed in claim 3 wherein said degassing chamber opening is elliptical.
66. (New) A frame as claimed in claim 3 wherein said electrolysis chamber opening is circular.
67. (New) A frame as claimed in claim 3 wherein said body has a rounded peripheral shape.
68. (New) A frame as claimed in claim 67 wherein said body has a circular peripheral shape.
69. (New) A frame as claimed in claim 3 wherein said body has a first side that is generally flat and an opposing second side that is generally flat.
70. (New) A frame as claimed in claim 3 wherein said first side defines a first connecting surface and said second side defines a second connecting surface.
71. (New) A frame as claimed in claim 70 wherein said first connecting surface and said second connecting surface have corresponding connecting structures to facilitate the first connecting surface of one said frame connecting with the second connecting surface of a corresponding one of said frames.
72. (New) A frame as claimed in claim 70 wherein said connecting structures comprise corresponding elevations and depressions defined in said first and second connecting surfaces.
73. (New) A frame as claimed in claim 72 wherein said elevations and depressions have corresponding block shapes.
74. (New) A frame as claimed in claim 72 wherein said elevations and depressions have corresponding triangular shapes.
75. (New) A frame as claimed in claim 74 wherein said first and second connecting surfaces are adapted to receive a sealing gasket between adjacent connected frames.

76. (New) A frame as claimed in claim 75 further comprising at least one electrolyte conduit opening defined in said body.
77. (New) A frame as claimed in claim 3 further comprising at least one separated gas conduit opening defined in said body.
78. (New) A frame as claimed in claim 77 further comprising a separated gas connecting channel defined in said body for connecting said at least one degassing chamber opening to said at least one separated gas conduit opening.
79. (New) A frame as claimed in claim 3 further comprising an electrolysis connecting channel defined in said body for connecting said at least one electrolysis chamber opening to said at least one degassing chamber opening.
80. (New) A frame as claimed in claim 3 wherein at least a portion of said at least one degassing chamber opening is positioned above said at least one electrolysis chamber opening.
81. (New) A frame as claimed in claim 3 wherein the surface area of said at least one degassing chamber opening is equal to or greater than the surface area of said at least one electrolysis chamber opening.
82. (New) An electrolyser module comprising a plurality of frames as claimed in claim 3, wherein said frames are connected together to define at least one electrolysis chamber and at least one degassing chamber, said degassing chamber having a rounded shape.
83. (New) A holding frame for an electrolyser module as claimed in claim 3, wherein said frame having an opening that forms an electrolysis chamber, characterized in that the frames have one or more additional openings that form one or more degassing chambers, wherein the gas that is generated is collected and allowed to separate into a liquid and gas phase, and further having two additional openings that form conduits for the removal of the gasses that are separated off in the internal degassing chambers.